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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/038,682	01/08/2002	Said G. Osman	4077-2	9029	
23117	7590 12/07/2004		EXAM	EXAMINER	
NIXON & VANDERHYE, PC			DAVIS, DANIEL J		
8TH FLOOR	- ··· - · - <del>-</del> · · · · ·		ART UNIT	PAPER NUMBER	
ARLINGTON, VA 22201-4714			3731		

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/038,682	OSMAN, SAID G.			
Office Action Summary	Examiner	Art Unit			
;	D. Jacob Davis	3731			
	ears on the cover sheet with the control of the cover sheet with the control of the cover sheet with the control of the cover sheet with the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE date of this communication, even if timely filed the cover sheet will be communication.	S) FROM nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133). , may reduce any			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4:	53 O.G. 213.			
Disposition of Claims  4)⊠ Claim(s) 1-23 is/are pending in the application.	n · · ·				
4a) Of the above claim(s) <u>17 and 18</u> is/are with 5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) <u>1-23</u> is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	drawn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the drawing(s) be held in abeyance. Se tion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Burea * See the attached detailed Office action for a list	s have been received. s have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	ion No ed in this National Stage			
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:				

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 8, 10, 12-15, 19, 21-23 are rejected under 35 USC 102(b) as being anticipated by U.S. Patent No. 3,604,414 to Borges. Borges discloses an apparatus capable of compressing bone graft material comprising spinal fixation (as best seen in Figs. 2 and 5) including first and second fixation plates 16 and 14, respectively. The plates 14 and 16 have openings 38 and 22, and interlocking elements/ratchet teeth 32 and 42. First plate 16 has a male projection, while second plate 14 has a female recess. The outer edges of the sides of the plates having the teeth are considered margins. Plate 14 comprises a stop 30. Sides 28 of plate 14 are considered a guide, while the sides of plate 16 that engage sides 28 are considered the male guide.

Claims 1, 8, 12, 19 and 20 are rejected under 35 USC 102(e) as being anticipated by U.S. Patent No. 6,402,756 to Ralph et al. Ralph discloses spinal fixation

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device in Figs. 3a-4 capable of compressing a bone graft comprising first male plate 100a and second female plate 100b. Ralph further discloses that the plates may be incrementally advanced towards one another and then locked into position with a setscrew to preclude movement of the plates away from one another.

The plates further comprise a stop, including the ends of the first and second plates, which limit advancement. The receiving plate 100b includes guides or channels, which receives margins of plate 100a.

### Claim Rejections - 35 USC § 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 103 which form the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- (c) Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 11 and 20 are rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 3,604,414 to Borges in view of U.S. Patent No. 5,616,142 to Yuan et al. Borges fails to disclose guides and channels on each of the plates 14 and 16 to align the plates with one another. Nevertheless, Yuan teaches in either of Figs. 1 or 2 male plate guides received within female plate guides/channels 11 and 11'. It would have been obvious to one of ordinary skill in the art at the time the invention was made to

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modify the Borgess plates to include a male guide in the male plate 13 and a female guide/channel in the female plate 14, as taught by Yuan, to maintain the plates in proper alignment.

Claims 2-7, 10, 13-16 and 21-23 are rejected under 35 USC 103(c) as being unpatentable over U.S. Patent No. 6,402,456 to Ralph et al. in view of U.S. Patent No. 3,659,595 to Haboush.

Ralph discloses that the plates are progressively advanced and locked against movement away from one another. The patent is silent with respect to interlocking elements or ratchet teeth. Nevertheless, Haboush teaches ratchet teeth in Figs. 7-9 enabling the progressive advancement of the plates while preventing their retraction. It would have been obvious to one of ordinary skill in the in the art at the time the invention was made to add interlocking ratchet teeth to the Ralph plates that advance incrementally, as taught by Haboush, to more effectively lock the plates in the advanced position.

As taught by Haboush, the teeth are placed on the margins, specifically on the lateral sides of the male projection 100a and on the interior lateral sides of the recess plate100b. The first plate is a male projection while the second plate has a female recess. The male projection includes a pair of legs 102a and 102b, and a slot as seen in Fig. 3a. The device includes a means for biasing including the hole100c and the setscrew 100e. Openings 110 and 112 cooperate with fasteners.

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Claim 9 is rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 6,402,456 to Ralph et al. in view of U.S. Patent No. 5,549,612 to Yapp et al. Ralph fails to disclose the "first and second plates [are] curved in directions normal to one another." Nevertheless, Yapp teaches a curved vertebral plate in Fig. 4. It would have been obvious to one of ordinary skill in the art at the time the invention was made to curve the Ralph plates to conform to the curvature of the spine. The result is two plates that are curved in a direction normal to one another.

### Response to Arguments

Applicant's affidavit, filed September 20, 2004 has been considered and is deemed to overcome U.S. Publication No. 2002/0188296 to Michelson. However, applicant's arguments are most in view of the new grounds of rejection.

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#### Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 4,175,880 to Muller, U.S. Patent No. 5,616,1472 to Yuan et al. and German patent DE 40 07 306 to Thomas et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Jacob Davis whose telephone number is (571) 272-4693. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on (571) 272-4963. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAVID O. REIP RIMARY EXAMINER

DJD